

U S WEST, Inc.  
Suite 700  
1020 Nineteenth Street, NW  
Washington, DC 20036  
202 429-3123  
FAX 202 296-5157

EX PARTE OR LATE FILED

DOCKET FILE COPY ORIGINAL

**USWEST**

Robert H. Jackson  
Executive Director-  
Federal Regulatory

**RECEIVED**

**JUN - 5 1997**

*Ex Parte*

June 5, 1997

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W., Room 222  
Washington, D.C. 20554

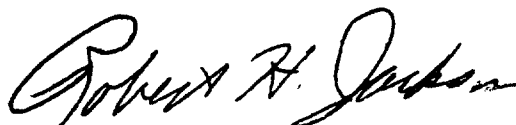
Re: Telephone Number Portability, CC Docket No. 95-116

Dear Mr. Caton:

Today, Ken Ackerman, Jeff Mitchell and the undersigned representing U S WEST, Inc. met with Carol Matthey, Steven Teplitz and Jonathan Askin in conjunction with the Commission's Further Notice of Proposed Rulemaking in the above-numbered docket. We discussed the potential risks to network reliability if local carriers receive unexpected, unqueried traffic. We discussed the need for a common understanding among all service providers of the term "N-1 carrier. Also, we discussed the need for all service providers, ILECs, CLECs and IXCs, operating as an N-1 carrier to query all traffic, rather than to default it to the terminating carrier. The following attachment was left behind. In addition, we discussed the possible overload of signaling links, which are engineered and deployed based on expected query volumes, if a carrier received unexpected, unqueried traffic. Please include a copy of this letter and the attachment in the record in this proceeding.

In accordance with 47 C.F.R. § 1.1206(a)(1) of Commission's rules, the original of this letter and one copy are being filed with your office. Acknowledgment and date of receipt are requested. A duplicate of this letter is included for this purpose.

Sincerely,



Attachments

cc: Carol Matthey  
Steven Teplitz  
Jonathan Askin

No. of Copies rec'd 041  
List A B C D E



# **“Failure to Query at the N-1 Carrier Level & Network Reliability”**

**U S *WEST*, Inc.**

on behalf of

U S *WEST* Communications (USWC)

&

U S *WEST* Media Group (USWMG)

June 5, 1997

There is an Industry expectation that the N-1 Carrier will query all calls.

- While the FCC declined to mandate that all N-1 carriers perform queries on all calls, the *Reconsideration Order* in this docket (§125) recognizes the expectation that queries will be performed at this level.
  - “We deny Pacific's request that we require all N-1 carriers, including interexchange carriers, to meet the implementation schedule we established for LECs.”
  - “. . . [W]e are not convinced that Pacific's hypothetical situation, whereby the N-1 carrier would not perform any queries and the original terminating LEC would thus have to perform all the queries not performed by the originating LEC, will arise often. The industry already appears to favor using the N-1 scenario, under which the N-1 carrier performs the database query, as indicated in the majority of comments on call processing scenario issues received pursuant to the original Notice of Proposed Rulemaking.”
  - “Therefore, most interLATA calls will be queried by the major interexchange carriers, not the incumbent LECs.”



U S WEST Communications is sizing its signaling network to handle its own N-1 traffic, plus expected contract traffic, which is prearranged.

- USWC is engineering its number portability SCPs against a failure situation.
  - In a failure situation, one-half of a mated SCP is lost. The other half continues to operate.
- Maximum query volumes assume that all available NXX codes are opened to porting initially.
- USWC estimates that third party demand for queries will be approximately 5% of USWC query volumes based on discussions with potential customers.



U S WEST Communications is sizing its signaling network to handle its own N-1 traffic, plus expected contract traffic, which is prearranged. (cont'd).

- USWC will install number portability SCPs (5 mated pairs) in Minneapolis (MN, IA, ND, SD, NE); Seattle (WA, ID); Denver (CO, MT, WY); Phoenix (AZ, NM); and Portland (OR, UT).
- These SCPs and associated links will be sufficient to handle all USWC N-1 traffic and contract queries at maximum volumes.
  - Through 2001 in a failure situation. (0.04% probability based on SBC paper, which discussed the Houston MSA.)
  - Note that this conclusion assumes that all the software works as designed in actual operating conditions.



U S WEST Communications is sizing its signaling network to handle its own N-1 traffic, plus expected contract traffic, which is prearranged. (cont'd).

- If and when USWC's signaling network would be expanded, after initial deployment, will depend on traffic, technical changes, industry and regulatory requirements and cost recovery. Should additional capacity be added? Who would pay for additional capacity? What level of risk is acceptable?
- USWC will engineer its signaling network to meet a failure situation, and have 5 mated SCP pairs in 2000.

## Failure of CLECs operating as N-1 carriers to query calls will impair network reliability.

- USWC assumes that CLECs will follow the spirit of the *Reconsideration Order* by querying calls when they are the N-1 carrier. Accordingly, USWC is not sizing its signaling network to handle CLEC N-1 traffic. However, if this assumption does not hold true, network reliability could be impaired.
- CLEC estimated market share figures in Washington State of 20% by 2000. Using that benchmark yields the following:
  - Failure of CLECs to query N-1 carrier traffic would exceed USWC signaling network capacity beginning in 2000.
  - In addition, CLEC deployment of a single SCP would effectively use USWC as a back-up, which, in turn, could result in unexpected network failures.

## Failure of IXCs operating as N-1 carriers to query calls will impair network reliability.

- USWC assumes that IXCs will follow the spirit of the *Reconsideration Order* by querying calls when they are the N-1 carrier. Accordingly, USWC is not sizing its signaling network to handle IXC N-1 traffic. However, if this assumption does not hold true, network reliability could be impaired.
  - USWC examined IXC call volumes where the IXC would be the N-1 carrier. Using that benchmark, failure to query traffic at the N-1 carrier level would create query demands that exceed USWC's capacity beginning in 2001 based on maximum query volumes. (5 mated SCPs).
  - In addition, IXC deployment of a single SCP would effectively use USWC as a back-up, which, in turn, could result in unexpected network failures.



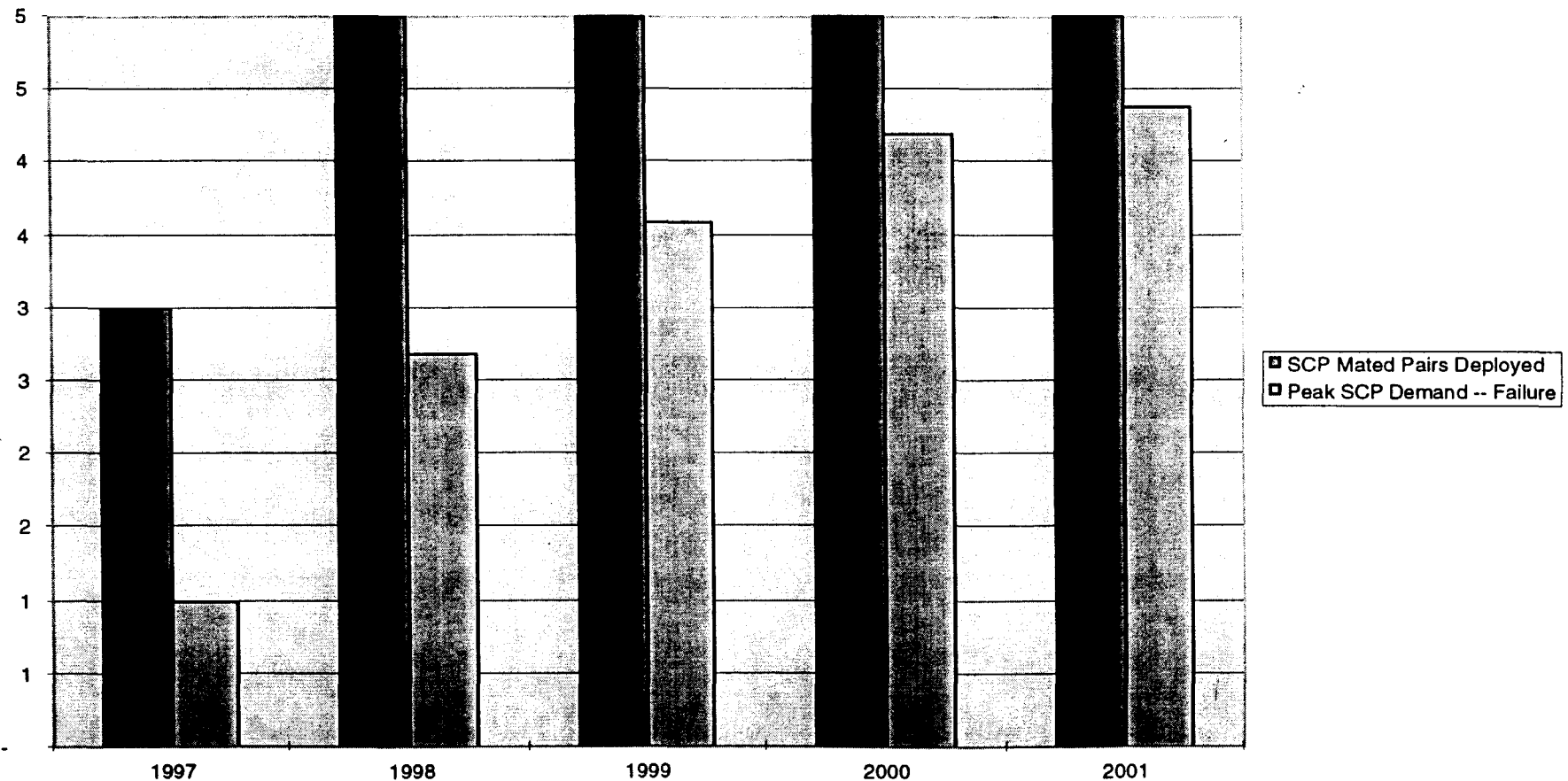
## Failure of both CLECs and IXC's operating as N-1 Carriers to query calls would harm network reliability

- The impact of a failure of both CLECs and IXC's operating as N-1 carriers to query calls would be massive upon USWC's network reliability.
  - Failure to query traffic at the N-1 carrier level would create query demands that exceed USWC's capacity beginning in 2000 based on maximum query volumes. (5 mated SCPs)
  - In addition, CLEC and IXC deployment of a single SCP would effectively use USWC as a back-up, which, in turn, could result in unexpected network failures.



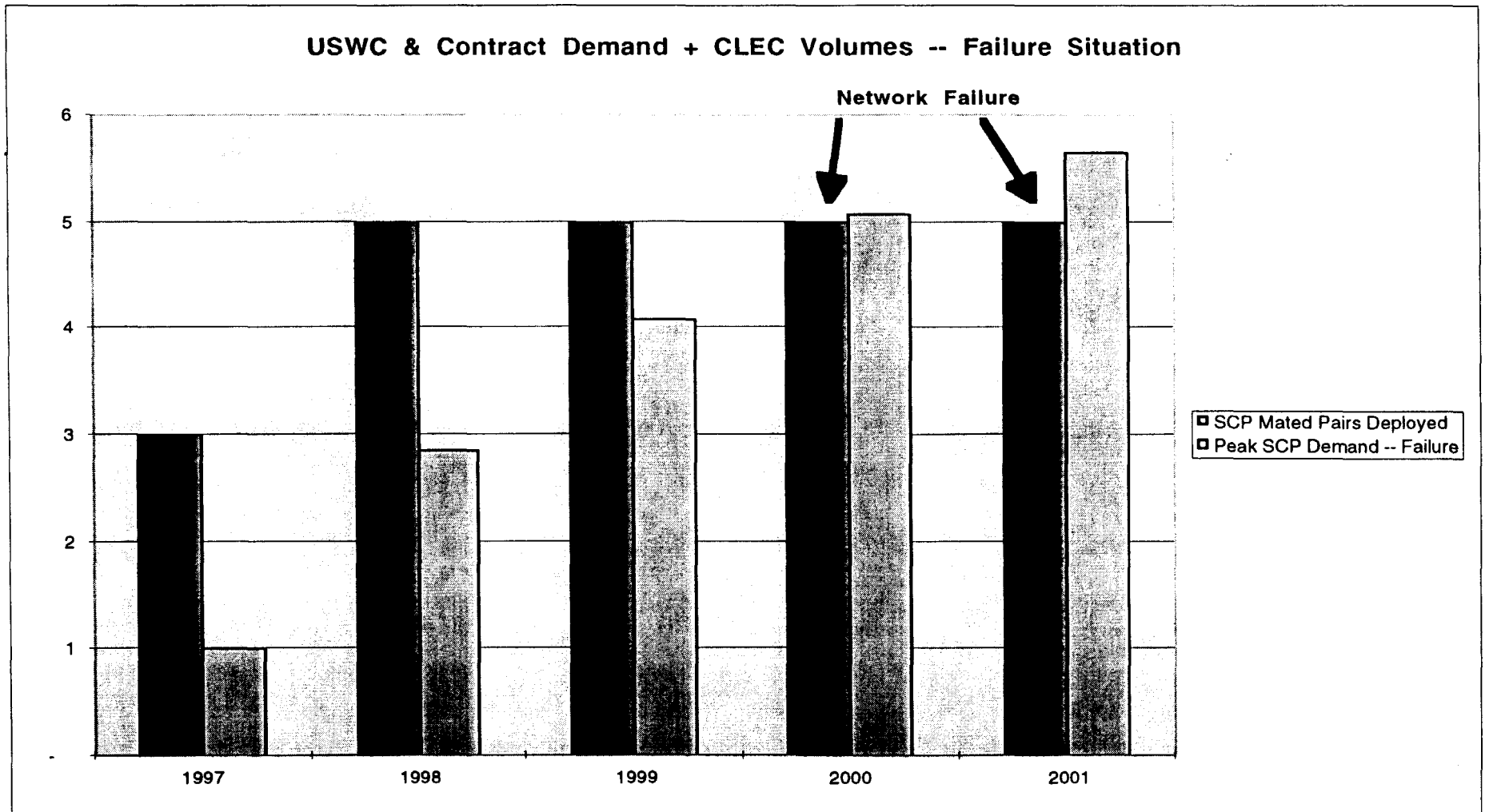
USWC's signaling network can handle its traffic (USWC N-1 and Contract volumes) in an SCP failure situation.

USWC Queries & Query Sales under Contract -- Failure Situation



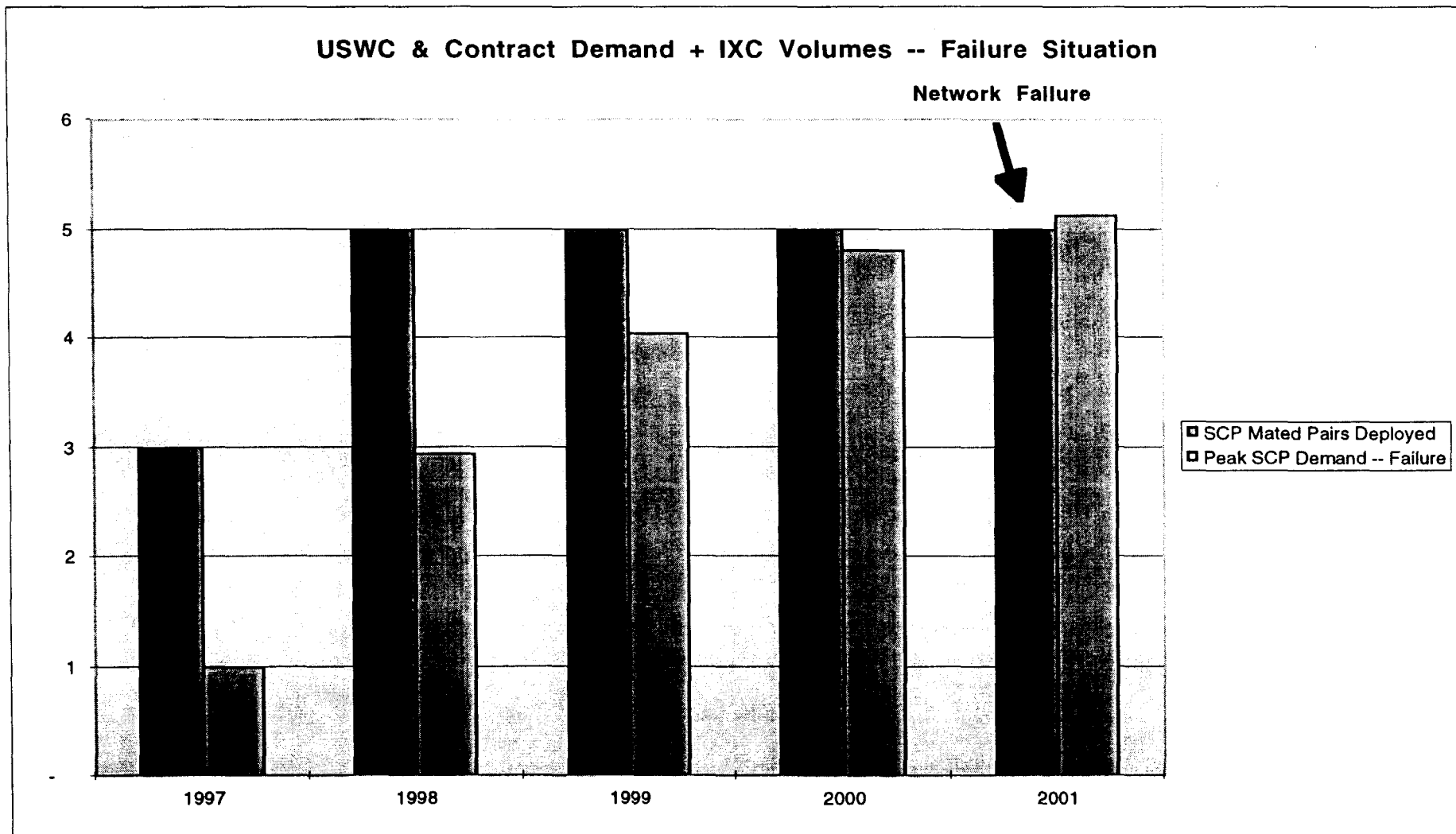


Non-queried CLEC N-1 traffic would overload USWC's signaling network in a failure situation by 2000.

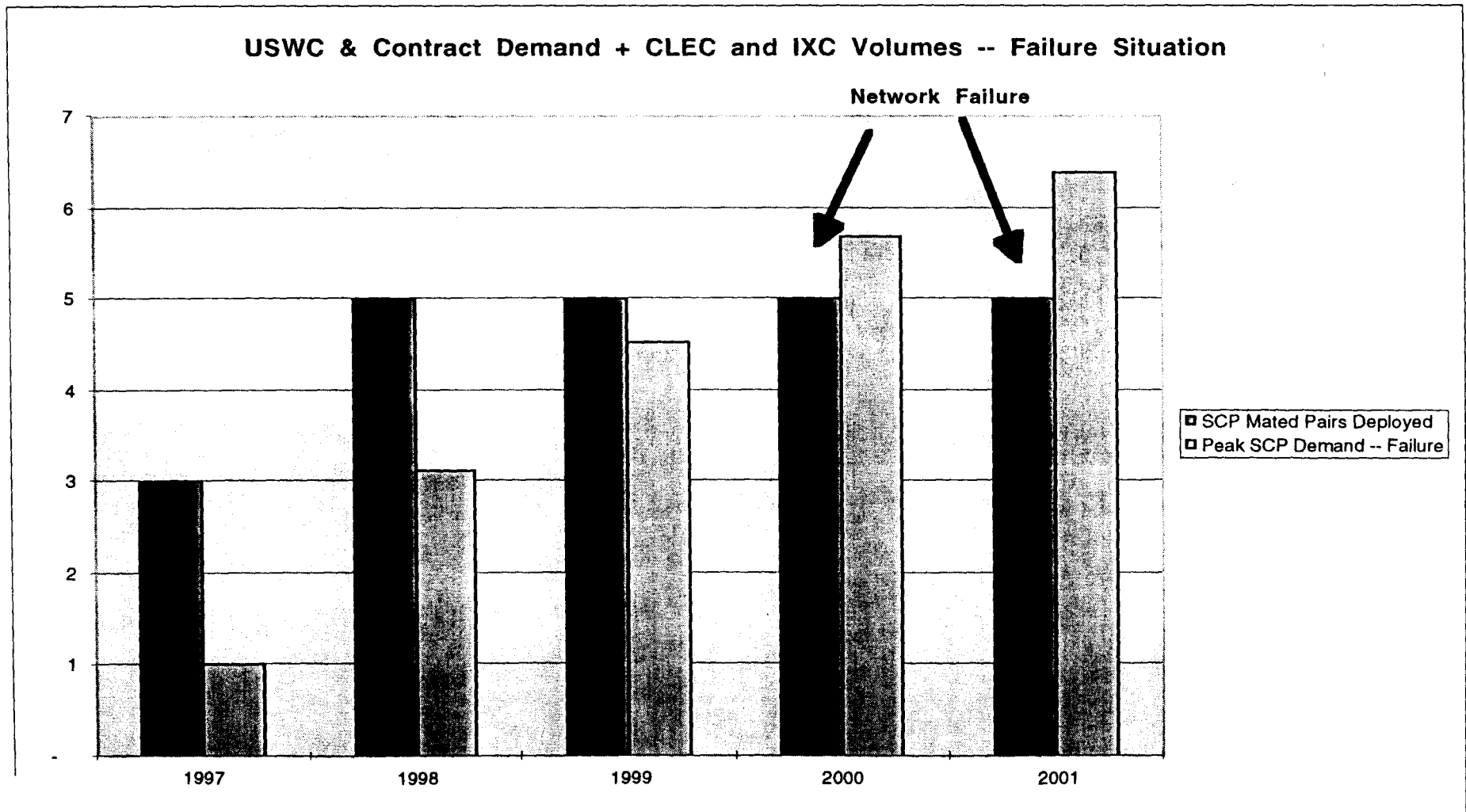




Non-queried IXC N-1 traffic would overload USWC's signaling network in a failure situation in 2001.



Network failure occurs by 2000 with non-queried CLEC & IXC N-1 traffic in a failure situation.



## Everyone loses if N-1 carriers fail to query traffic.

- Number portability is a key to local competition. However, network failures caused by non-queried N-1 traffic will sour the public on both number portability and local competition. No one wins!
  - U S WEST Media Group, a CLEC, has pledged to follow FCC rules and industry guidelines on number portability queries.
  - We will either query the traffic ourselves or have a contract for query service in place when we are the N-1 carrier.
- The FCC and the Network Reliability Council should seek and receive commitments from all operators (ILECs, CLECs and IXCs) that they will make pre-operational plans to handle their N-1 traffic, rather than default it to the N carrier.
- The FCC should allow all carriers to price default queries in a manner to discourage default.